B2500

MAINTENANCE GUIDE

MG 252 830 172 - A

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MAINTENANCE GUIDE

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1. ANALYSIS

1.1 PREVENTIVE MAINTENANCE

To keep the terminal in good working condition, the following operations should be carried out regularly:

- Cleaning the CIS window of the flatbed scanner.
- Cleaning the front panel keys and the printer covers.
- Printer maintenance (refer to chapter **Laser printer**, page 21).
- Cleaning the printer with a soft cloth, **never use abrasives or detergents**.

1.1.1 SCANNER CIS WINDOW

1 - Set the On/Off switch to Off (position 0).

2 - Open the flatbed scanner cover.

3 - Clean the CIS window with a lint-free cloth moistened with isopropyl alcohol or use anti-static paper used for cleaning optic glass.

Recommended interval: depending on utilization; it is advisable to make a local copy to check if the window is clean.

1.1.2 FRONT PANEL KEYS AND COVERS

1.1.2.1 Cleaning the front panel keys

1 - Set the On/off switch to Off (position O).

2 - Clean the top of the front panel and the keys with a lint-free cloth moistened with isopropyl alcohol or a spray-on cleaning product.

3 - Leave the product on for a few seconds before wiping it off.

Recommended interval: to be defined depending on utilization.

1.1.2.2 Cleaning the covers

It is advisable to clean all the covers during a maintenance visit.

1 - Set the On/Off switch to Off (position O).

2 - Clean the external areas of the covers with a lint-free cloth moistened with isopropyl alcohol or a spray-on cleaning product.

3 - Leave the product on for a few seconds before wiping it off.

1.2 MAINTENANCE-TUNING

1.2.1 SUPPLY VOLTAGES: CONNECTIONS BETWEEN THE POWER SUPPLY BOARD AND CPU BOARD

CPU board pin CN°	Values	Function
8-9	+ 5 V	5V Supply
10-11	GND	Ground
12-13	+24 V	24V Supply

Remark(s): The mains input of the power supply is protected by a fuse.

1.2.2 CHECKING THE QUALITY OF PRINTS AND TUNING THE SCANNER

To check or improve the quality of prints, you should first tune the scanner. Follow this procedure:

1 - Press ▼, enter **80** on the keyboard and confirm with **OK**.
The scanner is triggered and a tuning is carried out automatically.
At the end of the tuning, the terminal reverts to the default screen mode.

2 - Start making copies of documents on the CIS window and check the quality of the copies.

If the problem persists and if it is related to the scanner:

- Repeat the tuning procedure (step **1**).

If the problem persists and if it is related to the printer (the scanner still provides unsatisfactory results):

1 - Press ▼ then enter **54** on the keyboard.
The terminal prints the list of printer tunings.

2 - Check the printer's printing and copying parameters.

3 - Check the consumable.

1.3 DISASSEMBLY/ASSEMBLY WORKSHEETS

Attention - BEFORE DISASSEMBLING/ASSEMBLING, MAKE SURE THE TERMINAL IS SWITCHED OFF.
DISCONNECT ALL CORDS AT THE FRONT AND BACK OF THE TERMINAL (USB AND POWER SUPPLY).

Remark(s): Depending on the model, remove the front panel.

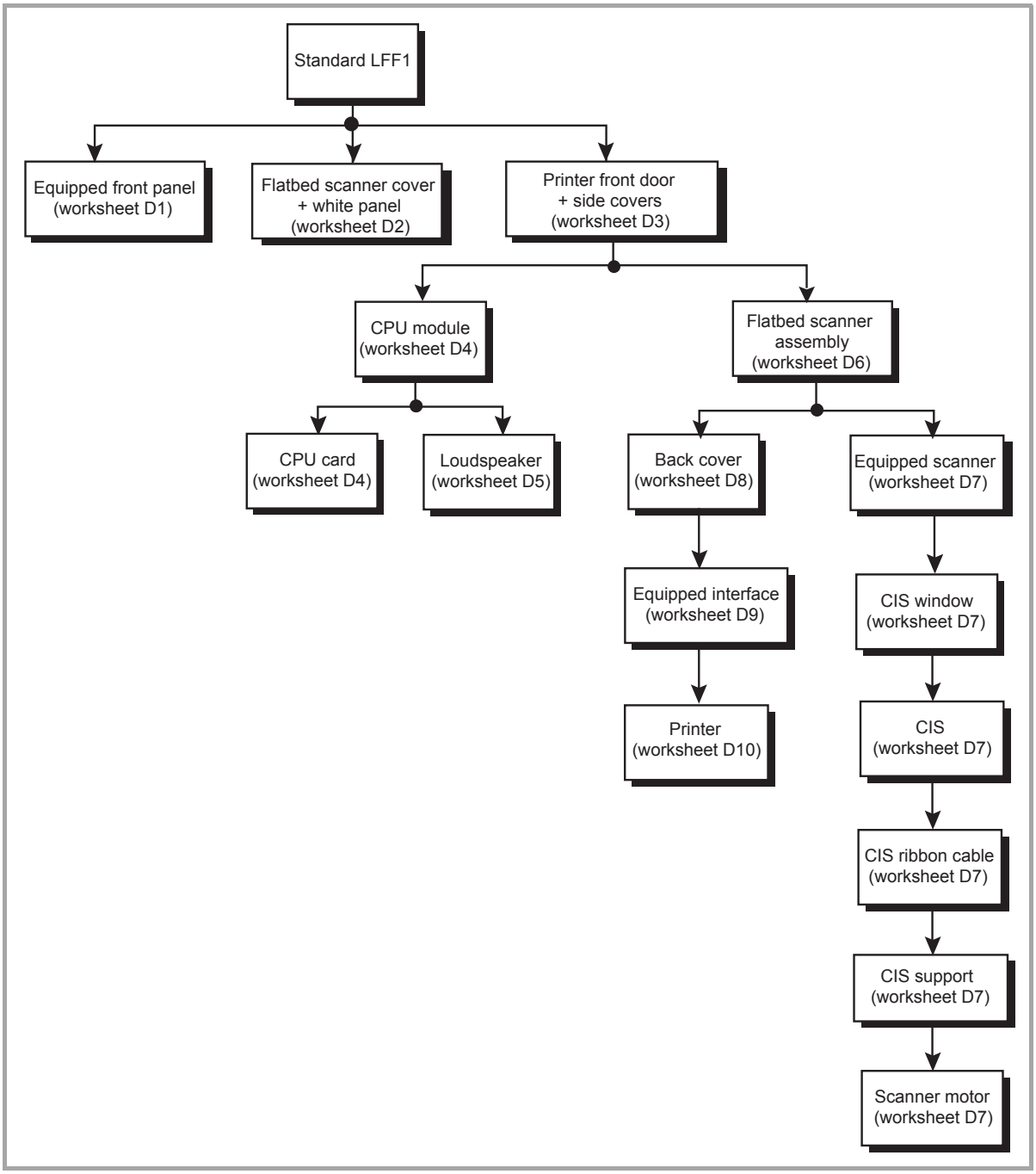
1.3.1 LIST OF TOOLS

- Cross-threaded (Philips) screwdriver
- Flat screwdriver (medium size)

1.3.2 LIST OF WORKSHEETS

- D1= Equiped front panel
- D2= Flatbed scanner cover and white panel
- D3= Printer front door and side covers
- D4= CPU Module
- D5= Loudspeaker
- D6= Flatbed scanner assembly
- D7= Equiped Scanner – Scanner window frame - CIS - CIS ribbon cable – CIS support - Scanner motor
- D8= Back cover
- D9= Equiped interface

1.3.3 WORKSHEET CHART


Standard LFF1
Equipped front panel (worksheet D1)
Flatbed scanner cover + white panel (worksheet D2)
Printer front door + side covers (worksheet D3)
CPU module (worksheet D4)
Flatbed scanner assembly (worksheet D6)
CPU card (worksheet D4)
Loudspeaker (worksheet D5)
Back cover (worksheet D8)
Equipped scanner (worksheet D7)
Equipped interface (worksheet D9)
CIS window (worksheet D7)
Printer (worksheet D10)
CIS (worksheet D7)
CIS ribbon cable (worksheet D7)
CIS support (worksheet D7)
Scanner motor (worksheet D7)

D1	**SUBJECT:** EQUIPED FRONT PANEL

Requirements

- None.

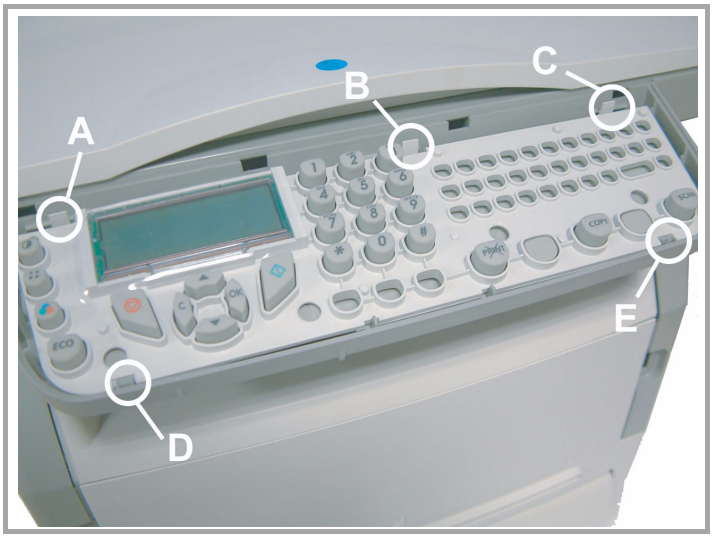
Preliminary steps

- None.

Disassembly

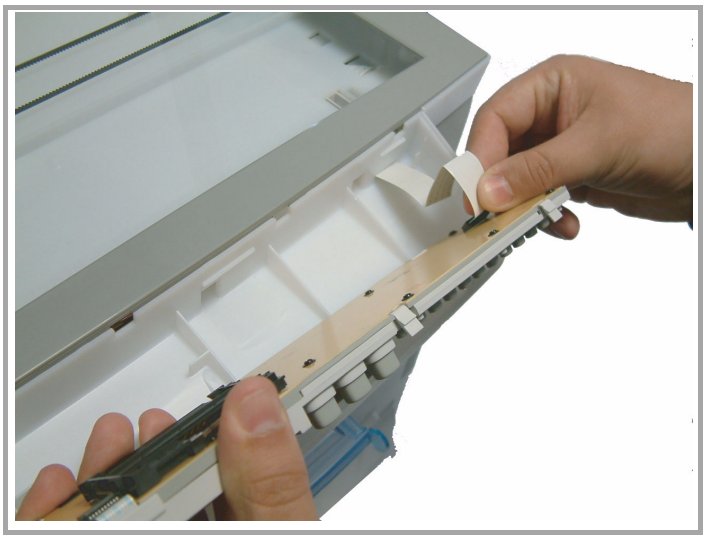
1 - Stand in front of the terminal.

2 - Unlock the three clips of the front panel (**A**, **B** and **C**).



3 - Push the panel to the back to release it from the two bottom slots (**D** and **E**).

4 - Disconnect the panel ribbon cable from the panel card connector.



5 - Disassemble the equiped panel.

Assembly

1 - Unpack and check all new components.

2 - Connect the panel ribbon cable to the panel card connector.

3 - Position the panel by inserting the two lower bearings into their slots then clip the upper part into place.

D2	**SUBJECT:** FLATBED SCANNER COVER AND WHITE PANEL

Requirements

- None.

Preliminary steps

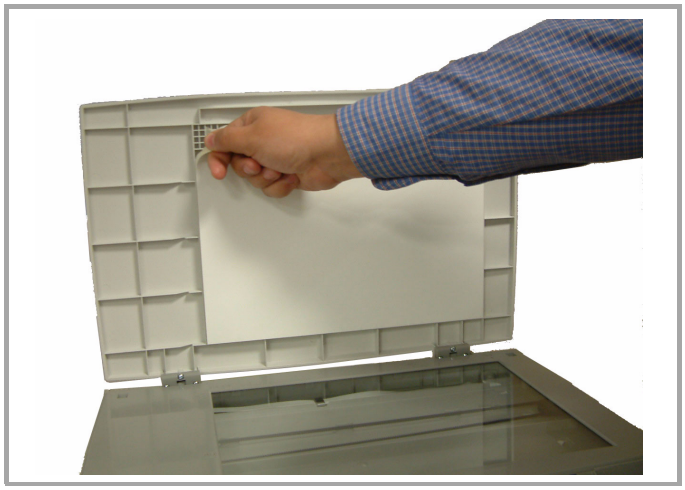
- None.

Disassembly

1 - Stand in front of the terminal.

2 - Open the flatbed scanner cover.

3 - Pull out the white panel from the flatbed scanner cover.



4 - Lift the flatbed scanner cover to extract the two hinges from their slots.

5 - Remove the flatbed scanner cover.

Assembly

1 - Unpack and check all new components.

2 - Assemble the flatbed scanner cover by inserting the two hinges into their slots.

3 - Stick the white panel into place.

D3	**SUBJECT:** PRINTER FRONT DOOR AND SIDE COVERS

Requirements

- Cross-threaded (Philips) screwdriver.
- Flat screwdriver.

Preliminary steps

- None.

Disassembly

- Printer front door

  1 - Stand in front of the terminal.

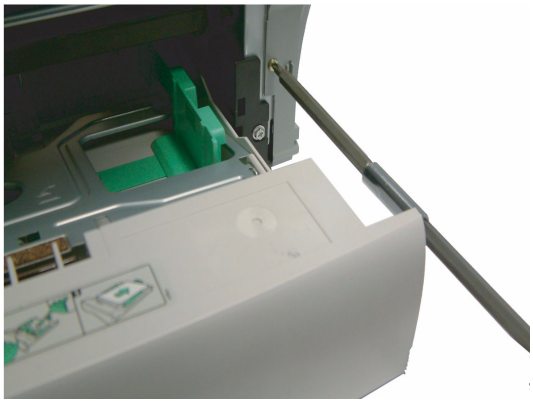
  2 - Press the left and right sides of the printer front door and pull it downwards towards you.

  3 - Move the arms away from each other and remove the printer front door.

- Side covers

  1 - Open the printer's paper tray.

  2 - Unscrew the two mounting screws on the front and back of the side covers.

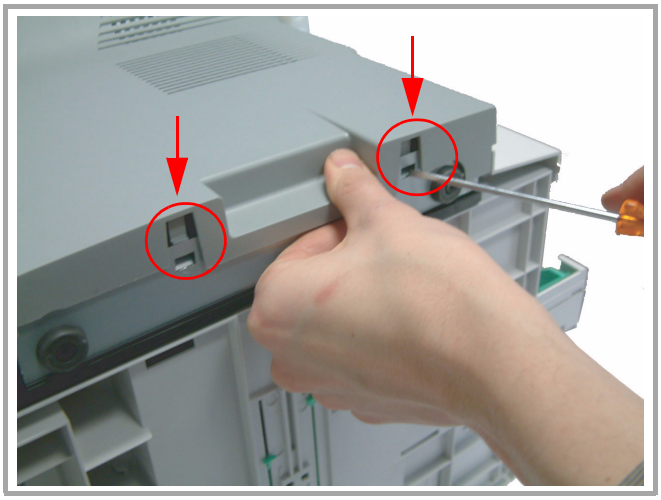


Front mounting screw of the right hand side cover

Back mounting screw of the right-hand side cover

D3	**SUBJECT:** PRINTER FRONT DOOR AND SIDE COVERS *(CONTINUED)*

3 - Using a flat screwdriver, unscrew the side covers from their slots located under the terminal.



4 - Unclip the side covers from the top slots located at the back of the terminal and pivot them towards yourself to remove them.

5 - Remove the side covers.

Assembly

1 - Unpack and check all new components.

2 - Assemble the covers, in first put the front part of the cover then the back part.

3 - Assemble the printer front door by reversing the steps for the disassembly procedure.

D4	**SUBJECT:**CPU MODULE

Requirements

- Cross-threaded (Philips) screwdriver.

Preliminary steps

- Removing the printer front door and the right side cover (see worksheet D3).

Disassembly

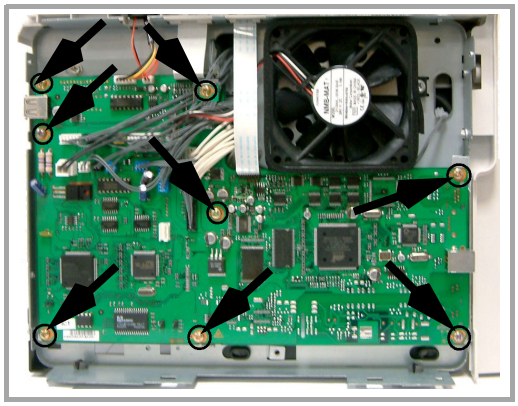
1 - Unscrew the three mounting screws of the CPU board armour plate.

2 - Pull the CPU board armour plate towards yourself and remove it.

3 - Disconnect all incoming cords and leads from the CPU module connectors.

Attention - MEMORIZE ALL CONNECTIONS FOR REASSEMBLY.

4 - Unscrew the eight mounting screws and remove the CPU board.



Assembly

1 - Unpack and check all new components.

2 - Place the CPU board in the rack, screw in and tighten the eight mounting screws.

3 - Connect all the cords and leads to their corresponding CPU board connectors.

4 - Position the CPU board armour plate, screw and tighten the three mounting screws.

5 - Position the right-hand side cover and the front door. (see Worksheet D3).

D5	**SUBJECT:** LOUDSPEAKER

Requirements

- None.

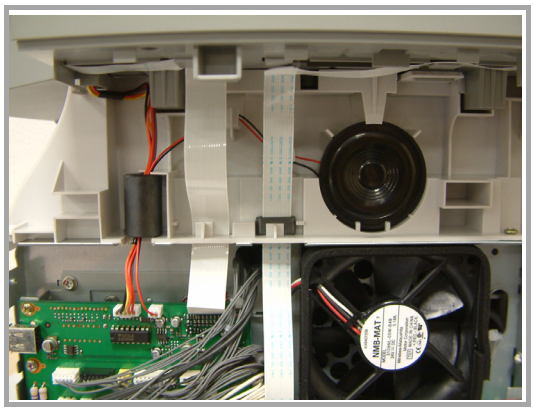
Preliminary steps

- Remove the front door and the right-hand side cover (see Worksheet D3).
- Remove the CPU armour plate (see Worksheet D4).

Disassembly

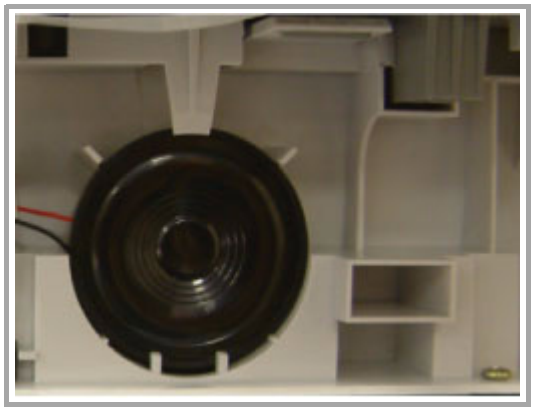
1 - Disconnect the loudspeaker connector from the CPU board.

2 - Remove the loudspeaker connector from its ferrite tube and cable guide.



Attention - MEMORIZE THE CABLE GUIDE FOR REASSEMBLY.

3 - Press the top clip inwards until it unclips and pull the loudspeaker towards yourself.



4 - Disassemble the loudspeaker.

Assembly

1 - Unpack and check all new components.

2 - Position the loudspeaker in front of its slot and insert the lower part.

3 - Press the top part of the loudspeaker until it clicks into place.

4 - Place the loudspeaker connector into its cable guide, do not forget the ferrite tube.

5 - Connect the loudspeaker connector to the CPU board.

6 - Put the CPU board armour plate into place (see Worksheet D4).

7 - Put the right-hand side cover and the front door into place (see Worksheet D3).

D6	**SUBJECT:** FLATBED SCANNER ASSEMBLY

Requirements

- Cross-threaded (Philips) screwdriver.
- Flat screwdriver.

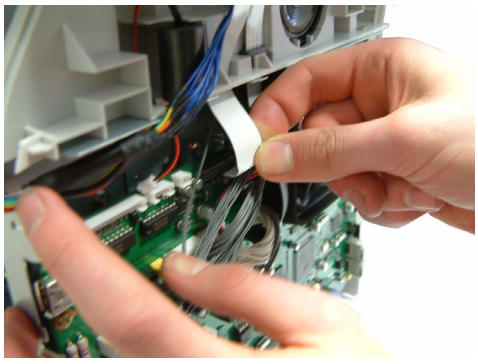
Preliminary steps

- Disassemble the flatbed scanner cover (see Worksheet D2).
- Disassemble the front door and the side covers (see Worksheet D3).
- Disassemble the CPU board armour plate (see Worksheet D4).

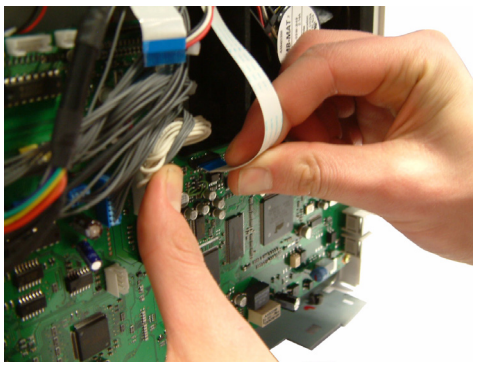
Disassembly

1 - Disconnect the scanner connector from the CPU board and remove it from its ferrite tube and cable guide.

2 - Disconnect the front panel ribbon cable and the CIS ribbon cable from the CPU board.



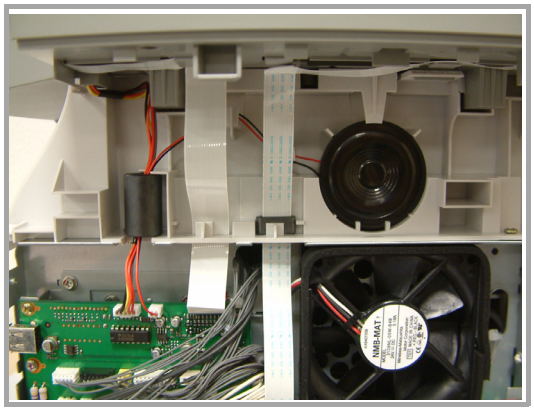
Connecting the front panel ribbon cable



Connecting the CIS ribbon cable

Attention - MEMORIZE THE CONNECTIONS FOR REASSEMBLY.

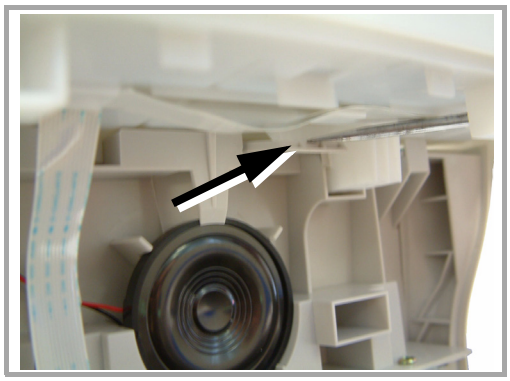
3 - Remove the front panel and CIS ribbon cables from their cable guide.



Attention - MEMORIZE THE CABLE GUIDE FOR REASSEMBLY.

D6	**SUBJECT:** FLATBED SCANNER ASSEMBLY *(CONTINUED)*

4 - Unlock the assembled flatbed scanner with a flat screwdriver and pull it towards yourself.



5 - Lift the assembled flatbed scanner and disassemble it.

Assembly

1 - Unpack and check all new components.

2 - Stand in front of the terminal.

3 - Position the assembled flatbed scanner on the equiped printer and slide it towards the left until it clicks into place.

4 - Place the front panel and CIS ribbon cables into their cable guide.

5 - Connect the front panel and CIS ribbon cables to the CPU board.

6 - Connect the scanner connector to the CPU board, do not forget the ferrite tube.

7 - Position the CPU board armour plate (see Worksheet D4).

8 - Position the side covers and the printer front door (see Worksheet D3).

9 - Position the flatbed scanner cover. (see Worksheet D2).

D7	**SUBJECT:** EQUIPED SCANNER – SCANNER WINDOW FRAME - CIS - CIS RIBBON CABLE – CIS SUPPORT - SCANNER MOTOR

Requirements

- Cross-threaded (Philips) screwdriver.
- Flat screwdriver.

Preliminary steps

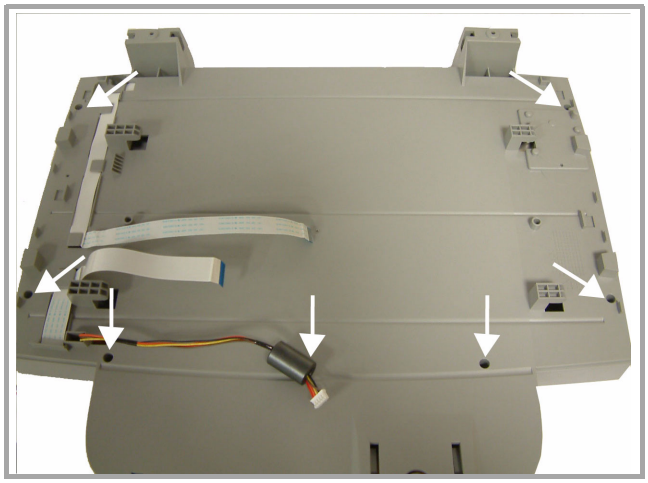
- Disassemble the scanner cover (see Worksheet D2).
- Disassemble the printer front door and the side covers (see Worksheet D3).
- Disassemble the CPU board armour plate (see Worksheet D4).
- Disassemble the assembled flatbed scanner (see Worksheet D6).

Disassembly

- Scanner window frame

1 - Take the assembled flatbed scanner and turn it upside down.

2 - Unscrew the seven mounting screws at the back of the equiped scanner and turn it upside down.

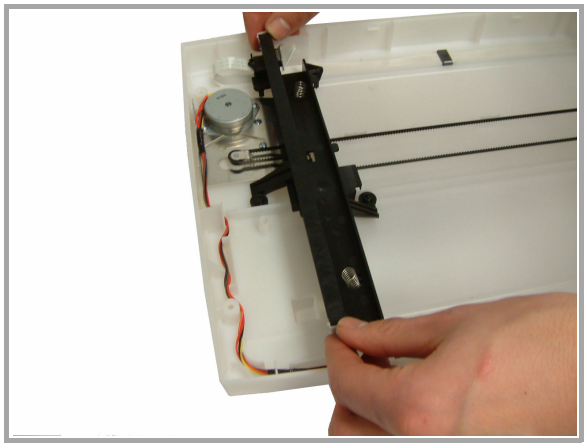


3 - Lift the front part of the scanner window panel and disassemble it.

D7	**SUBJECT:** EQUIPED SCANNER - SCANNER WINDOW FRAME - CIS - CIS RIBBON CABLE – CIS SUPPORT - SCANNER MOTOR *(CONTINUED)*

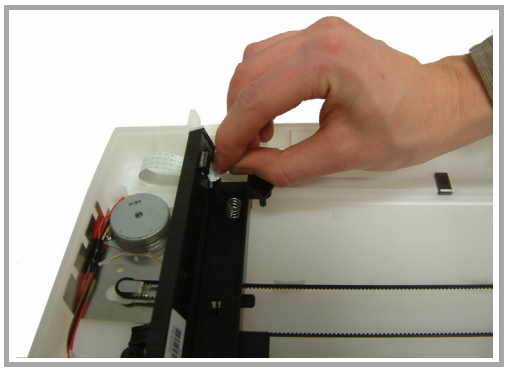
- CIS

1 - Lift the CIS backwards.



2 - Disconnect the CIS ribbon cable and disassemble it from its two side slots.

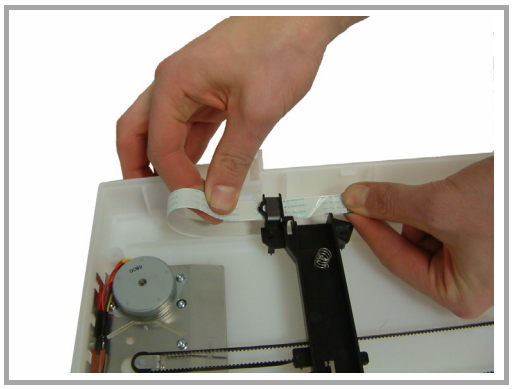
Attention - KEEP THE CIS SUPPORT SPRINGS AND SLIDES.



3 - Disassemble the CIS.

- CIS ribbon cable

1 - Unfold the end of the CIS ribbon cable and remove it from its slot.



2 - Slide the CIS ribbon cable out of its ferrite tube which is fixed to the CIS panel and remove it from the scanner.

3 - Remove the CIS ribbon cable from its cable guides located above and below the scanner bottom then slide it to extract it from the scanner bottom.

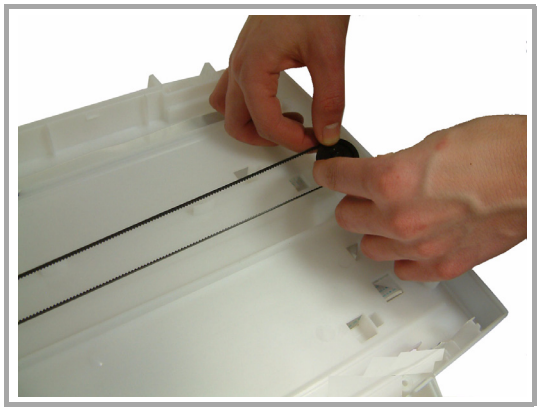
Attention - MEMORIZE THE CABLE GUIDE FOR REASSEMBLY.

4 - Disasssemble the CIS ribbon cable.

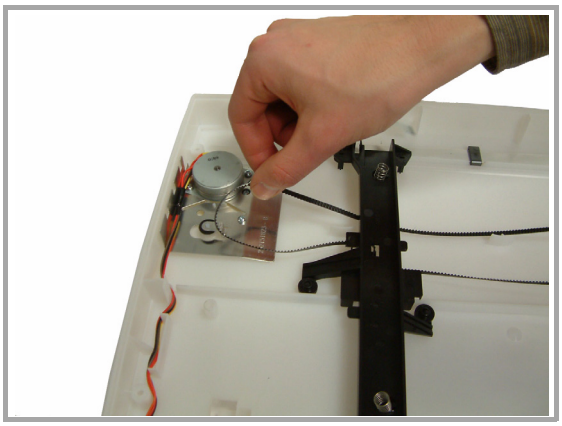
D7	**SUBJECT:** EQUIPED SCANNER - SCANNER WINDOW FRAME - CIS - CIS RIBBON CABLE – CIS SUPPORT - SCANNER MOTOR *(CONTINUED)*

- CIS support

1 - Lift the CIS drive pulley and the drive to extract the CIS drive pulley from its slot.



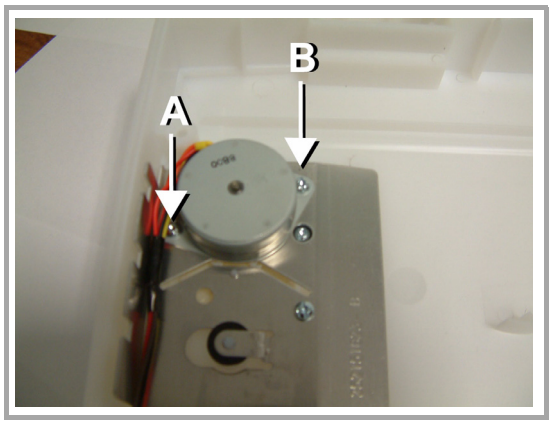
2 - Remove the belt from the drive pulley.



3 - Lift then disassemble the CIS panel.

- Scanner motor

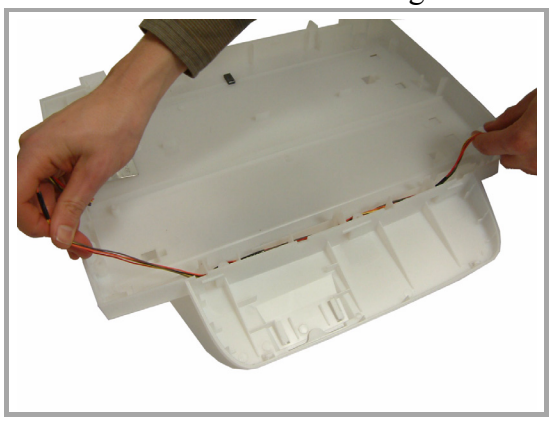
1 - Unscrew the two mounting screws of the scanner motor (**A** and **B**).



2 - Remove the end of the scanner motor connector from its ferrite tube.

D7	**SUBJECT:** EQUIPED SCANNER - SCANNER WINDOW FRAME - CIS - CIS RIBBON CABLE – CIS SUPPORT - SCANNER MOTOR *(CONTINUED)*

3 - Remove the CIS motor connector from its cable guide.



4 - Disassemble the scanner motor.

Assembly

1 - Unpack and check all new components.

2 - Position the scanner motor and screw in the two mounting screws.

3 - Place the motor connector into it cable guide, without forgetting the ferrite tube.

4 - Position the CIS support, place the belt in the CIS drive pulley, do not forget the CIS support springs.

Attention - CHECK THAT THERE IS ENOUGH GREASE ON THE PULLEY MOTOR AXIS.

5 - Place the CIS ribbon cable in its cable guide, do not foget the ferrite tube, then connect it to the CIS.

6 - Place the CIS, do not forget its slides and support springs.

7 - Position the scanner window frame by first inserting the back part, then insert the front part. Screw in the two mounting screws for the scanner window frame.

8 - Turn the equiped scanner around and screw in the seven mounting screws.

9 - Assemble the assembled flatbed scanner (see Worksheet D6).

10 - Assemble the CPU board armour plate (see Worksheet D4).

11 - Assemble the side covers and the printer front door (see Worksheet D3).

12 - Assemble the flatbed scanner cover (see Worksheet D2).

D8	**SUBJECT:** BACK COVER

Requirements

- Cross-threaded (Philips) screwdriver.

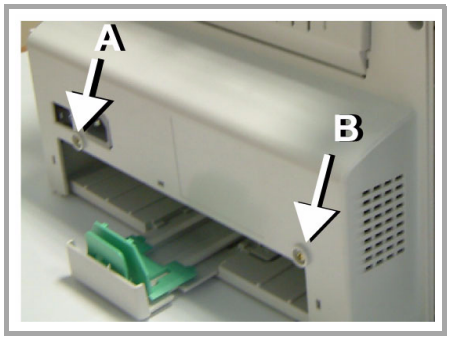
Preliminary steps

- Disassemble the flatbed scanner cover (see Worksheet D2).
- Disassemble the printer front door and the side covers (see Worksheet D3).
- Disassemble the CPU board armour plate (see Worksheet D4).
- Disassemble the assembled flatbed scanner (see Worksheet D6).

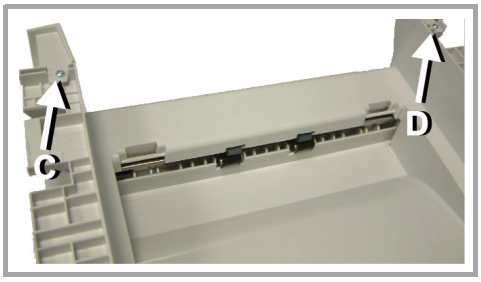
Disassembly

1 - Stand behind the terminal.

2 - Unscrew the two back mounting screws on the back cover (**A** and **B**).



3 - Unscrew the two top mounting screws on the back cover (**C** and **D**).



4 - Pull the back cover towards yourself and remove it.

Assembly

1 - Unpack and check all new components.

2 - Place the back cover and screw in the four mounting screws. (**A**, **B**, **C** and **D**).

3 - Assemble the assembled flatbed scanner (see Worksheet D6).

4 - Assemble the CPU board armour plate (see Worksheet D4).

5 - Assemble the printer front door and the side covers (see Worksheet D3).

6 - Assemble the flatbed scanner cover (see Worksheet D2).

D9	**SUBJECT:** EQUIPED INTERFACE

Requirements

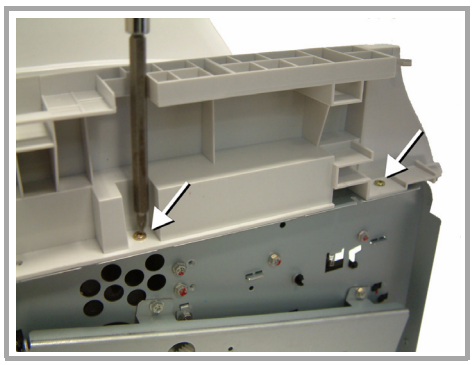
- Cross-threaded (Philips) screwdriver.

Preliminary steps

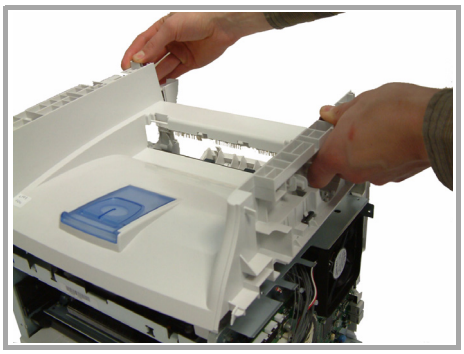
- Disassemble the scanner cover (see Worksheet D2).
- Disassemble the printer front door and the side covers (see Worksheet D3).
- Disassemble the CPU board armour plate (see Worksheet D4).
- Disassemble the loudspeaker (see Worksheet D5).
- Disassemble the assembled flatbed scanner (see Worksheet D6).
- Disassemble the back cover (see Worksheet D8).

Disassembly

1 - Unscrew the two mounting screws on the left and right side on the equiped interface.



2 - Lift and remove the equiped interface.



Assembly

1 - Unpack and check all new components.

2 - Position the equiped interface and screw in the four mounting screws on both sides.

3 - Assemble the back cover (see Worksheet D8).

4 - Assemble the assembled flatbed scanner (see Worksheet D6).

5 - Assemble the loudspeaker (see Worksheet D5).

6 - Assemble the CPU board armour plate (see Worksheet D4).

7 - Assemble the printer front door and the side covers (see Worksheet D3).

8 - Assemble the flatbed scanner cover (see Worksheet D2).

1.4 ADMINISTRATOR FUNCTIONS

Each one of the administrator functions described here can be accessed via a specific succession of keys.

The alphabetic keys are available via the navigation keys ▼ and ▲ via the keyboard.

For example, to enter a sequence ▼ *** A** (launching scanner tuning):

1 - Press the following key ▼.

2 - Press the following key *****.

3 - Press ▼ to display all the options available until you reach **A**.
Confirm your choice with **OK**.

1.4.1 INITIALIZING AND ERASING MEMORY

Before you start, set the 8 bit parameter installation configuration 1 to 1.

- Reset all parameters (user, installer or technical) to the default configuration (factory configuration):

▼ # 0

- Erase the directory:

▼ # 1

- Erase the logs :

▼ # 2

- Erase the printer counters:

▼ # 3

- Erase the consumable counters (▼ 85):open the printer front door then:

▼ # 4

To see the initialization message (this requires inserting the smart card **INIT**), switch On then Off.

- Reinitialize the flash data (erases all):open the printer front door then :

▼ # 5

- Erase all.
Reset to default configuration (combination of functions 0 and 8):

▼ # 7

- Erase all documents stored in memory:

▼ # 8

- Erase the first element of the printer queue :

▼ # I

- Erase Printer Error:

▼ (#) (T)

Then switch ON/OFF the machine

1.4.2 OTHER FUNCTIONS

Before you start, position the Soft-switch 1 bit n°8 to 1.

- Printing all parameters (including installation and technical parameters):

▼ (*) (1)

- Switching to forced standby mode regardless of the clock:

▼ (*) (2)

- Switching to software download via a phone line:

▼ (*) (3)

- Switching to software download via a computer link :

▼ (*) (4)

- Save the directory and parameters on I2C card:

▼ (*) (5)

- Save the directory and parameters via STN:

▼ (*) (7)

- Accept directory and parameters download via STN:

▼ (*) (8)

- Restore the directory and parameters from I2C card:

▼ (*) (9)

- Launching scanner tuning:

▼ (*) (A)

- Displaying miniboot version:

▼ (*) (%)

- Displaying the state of the applications, traffic and drivers:

▼ (*) (

- Display modem software version:

▼ (*) (M)

- Entering the serial number (with the SOS 1 bit 8 at 1):

▼ (*) (1)

- Displaying the internal counters:

▼ (*) (2)

- Rebooting the machine manually (with the SOS 1 bit 8 at 1):

▼ (*) (R)

- Displaying main software version, cheksum:

▼ (*) (V)

- Displaying the printer firmware version:

▼ (*) (:)

- Printing internal counters:

▼ (*) (Y)

- Tuning the level of PDL symbols:

▼ (*) (=)

1.5 REPLACING THE CPU BOARD

To replace the terminal's CPU board, follow this procedure:

1 - Print the terminal's parameters (user, administrator and technical) and the activity counter values in order to keep a record (▼ **5 4**).

2 - Replace the CPU board (see Worksheet D4, page 9).

3 - Tune the scanner (▼ **8 0**).

1.6 REPLACING THE SCANNER

To replace the scanner, follow this procedure:

1 - Print the terminal's parameters (user, administrator and technical) and the activity counter values in order to keep a record (▼ **5 4**).

2 - Replace the scanner (see Worksheet D7, page 13).

3 - Tune the scanner (▼ **8 0)** only if the quality of the copy is unsatisfactory.

2. LASER PRINTER

2.1 PERIODIC MAINTENANCE

Refer to the printer's technical manual

- Printer 230V L-1.1 (G182-93) / Printer 120V L-1 (G182-83)

2.2 ERROR MESSAGES AND SOLUTIONS

Refer to the printer's technical manual

- Printer 230V L-1.1 (G182-93) / Printer 120V L-1 (G182-83)

2.3 TROUBLESHOOTING

Refer to the printer's technical manual

- Printer 230V L-1.1 (G182-93) / Printer 120V L-1 (G182-83))

2.4 DISASSEMBLY/ASSEMBLY WORKSHEETS

Refer to the printer's technical manual

- Printer 230V L-1.1 (G182-93) / Printer 120V L-1 (G182-83)

2.5 REPLACING THE PRINTER

To replace the printer, follow this procedure:

1 - Set the On/Off button to Off (position 0).

2 - Disconnect the USB cables and the power supply cable located at the back of the printer.

3 - Disassemble the consumable (it belongs to the client).

4 - Disassemble the printer (see Worksheet D9, page 18).

5 - Reassemble all the elements of the new printer (see Worksheet D9, page 18).

6 - Reassemble the client's consumable.

7 - Reconnect the USB and power supply cable.

8 - Set the On/Off button to On (position I).

Remark(s): During repairs, it may be necessary to set the toner counter to 100% (▼ **# 4**). As a result, the remaining capacity indicated by the machine (▼ **8 6**) will not correspond to the user's actual toner cartridge capacity. In particular, the user may reach the end of the toner (poor quality of prints) before the remaining capacity displayed by the machine reaches 0%.